

Third Grade Scope and Sequence						
Unit	The Race	The Lost Toys	The Mango Tree	Walking Whales and other Wacky Tails	The True Story of The Ugly Duckling	Capstone Project
Anchor Phenomena	Students are off to the races but one student is struggling to get his/her car moving. The student will use forces to get his/her car moving and learn to predict future motion in the races.	Have you ever lost toys under your bed? Under a couch? We have all done it before, and often, our arms are not long enough to reach the toys. There may be other ways to grab the toys. How can you interact with an object without touching it? Students will finish the unit with a design project that solves a problem.	Mangos are delicious. My best friend's dad has a small mango grove in the Philippines, but that is far away. Can I have a mango tree in my backyard? In this unit students will collect weather data, compare climates around the world, and learn about whether or not they can have their own mango tree. Finally, they will explore extreme weather and city preparedness plans and analyze design solutions that reduce the impacts of weather. Maybe they will even protect some mango trees.	Scientists were in Peru digging through layers of sediment and happened upon an unusual skeleton. With the body of a whale that typically originated in Asia and four hooved legs similar to a mammal, they were perplexed to say the least. Was it a whale? Was it a land animal? And what role did it have in the history of this whales? Starting with the history of whales, students will take a journey with the whale, starting with fossils and their environment long ago to learn about environment, variations in characteristics, how groups of animals work together, and habitats. Students will end by relating this to new animals.	Everybody has heard the true story of the big bad wolf, but have you heard the true story of the ugly duckling? All of the ducklings were so mean to that little one, but eventually, well, I don't want to ruin the ending. Using the story of The Ugly Duckling and the life cycles of ducks, swans, and other animals to learn about the true beauty in life...nature.	
Performance Expectations	3-PS2-1 3-PS2-2	3-PS2-3 3-PS2-4 3-5-ETS1-1 3-5-ETS1-2, 3-5-ETS1-3	3-ESS2-1 3-ESS2-2 3-ESS3-1 3-5-ETS1-2	3-LS4-1 3-LS4-3 3-LS4-4 3-LS2-1 3-5-ETS1-3	3-LS3-2 3-LS1-1 3-LS2-1 3-LS4-2	
DCIs	PS2.A Forces and Motion	PS2.B Types of Interactions ETS1. A (ETS1. B, ETS1.C)	ESS2.D Weather and Climate ESS3.B Natural Hazards ETS1.B Developing Possible Solutions	LS2.C Ecosystems Dynamics, Functioning, and Resilience LS2.D Social Interactions and Group Behavior LS4.A Evidence of Common Ancestry and Diversity LS4.C Adaptation LS4.D Biodiversity and Humans ETS1.B ETS1.C	LS1.B Growth and Development of Organisms LS3.A Inheritance of Traits LS3.B Variation of Traits LS4.B Natural Selection	
SEPs	Asking Questions and Defining Problems Developing and Using Models Planning and Carrying Out Investigations	Asking Questions and Defining Problems (Planning and Carrying Out Investigations, Constructing Explanations and Designing Solutions)	Planning and Carrying Out Investigations Analyzing and Interpreting Data Engaging in Argument from Evidence Obtaining, Evaluating, and Communicating Information Constructing Explanations and Designing Solutions	Analyzing and Interpreting Data Engaging in Argument from Evidence	Developing and Using Models Analyzing and Interpreting Data Constructing Explanations and Designing Solutions	
CCCs	Patterns Cause and Effect	Cause and Effect	Patterns Cause and Effect	Cause and Effect Scale, Proportion, and Quantity	Patterns Cause and Effect	
5E Cycles	2 cycles	1 cycle	2 cycles	3 cycles	3 cycles	
Engineering Design Process		Yes	Yes	Optional project		
Formative Assessment 1						
Formative Assessment 2						
Scientific Explanation	2 full scientific explanations. Focus on claim and evidence.	2 full scientific explanations. Focus on claim and evidence.	3 full scientific explanations. Focus on reasoning.	4 full scientific explanations. Focus on clarity of full explanation or from data analysis.	4 full scientific explanations. Focus chosen from data analysis.	
Summative Assessment	Written exam consisting of MC and CR Performance Test	Engineering design project	Written exam consisting of MC and CR and Engineering design project	Written Exam and other project TBD	Creative writing (fiction or non-fiction)	Independent or Group Project
Interim Assessment (occurs approximately at the end of the given block)	Interim I		Interim II		Interim III	
Length (based on having science between 3-5 days a week)	6-7 weeks	4-5 weeks	6-7 weeks	6-8 weeks	6-7 weeks (this time may continue into the capstone)	2-3 weeks
Formative Assessment Types	Investigation and Analysis Short Answers MC (use sparingly) Letters and Stories Design and Design Projects Research Critiques Scientific Explanations Other					